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Honorary Chair Session

End o' the line revisited

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When endothelin-1 was discovered it was hailed as the prototypical endothelium-derived contracting factor (EDRF). However, over the years little evidence emerged convincing this author that the peptide actually contributes to moment-to-moment changes in vascular tone elicited by endothelial cells. This was attributed to the profound inhibitory effect of nitric oxide (NO) on both the production (by the endothelium) and the action (on vascular smooth muscle) of endothelin-1. Hence, at least in the author's mind, endothelin-1 was likely to initiate acute changes in vascular diameter only under extreme conditions of endothelial dysfunction when the NO bioavailability is considerably reduced if not absent. This lecture will survey more recent findings and decide whether this concept should be revised, or maybe not…

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